The reason this subcommittee was initially formed was to look at what engineering efforts might be made to better include handle real-world users of our pedestrian and bicycle transportation system, rather than imagined users who follow all rules. My bias was that we are probably asking more than can be expected of real people, such as requiring a pedestrian to travel long distances out of their way to use a cross walk. Rather than repeat the details of that initial discussion, I will just include my previous summary of those incidents leading up to the subcommittee's formation.

Since forming, the subcommittee had a meeting with MCDOT traffic engineering staff to learn about possible engineering tools that might be brought to bear on this problem. What was learned at the meeting was that there are few tools in the Traffic Signal department of DOT available for addressing this problem. More specifically, it was explained that this department focused their planning and modeling at the intersection level, rather than at a network level and in addition there was no modeling focused on nonautomotive users. It was suggesting that Park & Planning would have a higher level focus.

A meeting was then arranged with Planning staff including those with expertise in network modeling. At that meeting we learned that there was no one looking at the pedestrian and bicycle facilities as a functioning network. More basic than that was the explanation that there was not even an inventory of pedestrian and bicycle facilities. By network I mean to include all components that are needed by the user to get from one point to another. For pedestrians, this would include sidewalks, crosswalks, connecting links- public and private, crosswalk signals and their cycle times. For cyclists this would include bike lanes, paths along roads, through parks, and through neighborhoods that are typically available to users, as well as roads graded by their bicycle comfort levels and travel times that might be associated with situations where for example making a left turn would be so difficult due to traffic or road design that multistep intersection crossings are required. With such an inventory one of the first things that could be down would be to create a map of the current system to see where the obvious missing links are. A more sophisticated effort could involve modeling travel times using the existing network versus using unauthorized routes, such as crossing a road without a crosswalk. As just one example of what might be done with such an inventory, a model might show that areas where the time and distance for an unauthorized routes is significantly longer than the available authorized route significantly contributors to noncompliance of users.

There do seem to be scattered agencies of the County that may have some parts of this inventory, but there is certainly no complete inventory. As such an inventory would be the first step at understanding what problems exist and understanding their relative weights, I would like to propose the subcommittee issue a resolution to address that deficiency. Below is my first pass at this-

Resolution:

It is clear that pedestrian and bicycle casualties are and continue to be a problem for citizens of our County, and our elected officials having understood this problem have made its solution a priority. As part of that effort, the Pedestrian and Traffic Safety Advisory Committee was formed to research the problem and advise the Executive on possible solutions. One problem that has come to light is an often high rate of users not using the system as intended by the designers. While this high rate of noncompliance is typically attributed to the user, it may in small or even large part be due to poor design or poor overall functioning of the network. To understand if this is the case, a network level study would be needed. Research by the Committee found that such a study could not even be started because there is no inventory of the relevant infrastructure. Inventory and network are meant to include all components that are needed for a user to complete their trip. (For pedestrians, this would include sidewalks, crosswalks, connecting links- public and private, crosswalk signals and their cycle times. For cyclists this would include bike lanes, paths along roads, through parks, and through neighborhoods that are typically available to users, as well as roads graded by their bicycle comfort levels and travel times that might be associated with situations where for example making a left turn would be so difficult due to traffic or road design that multistep intersection crossings are required.) As such, the Committee recommends that priority is given to coordinating the partial inventory that does exist, completing the portions that do not exist, and then using that inventory as the basis of network wide analysis of the functioning of that network from the viewpoint of pedestrian and bicyclist users.

Sincerely

Alan Migdall